"CO DIALTONE LEARNING SEQUENCE" FLOW MODEL

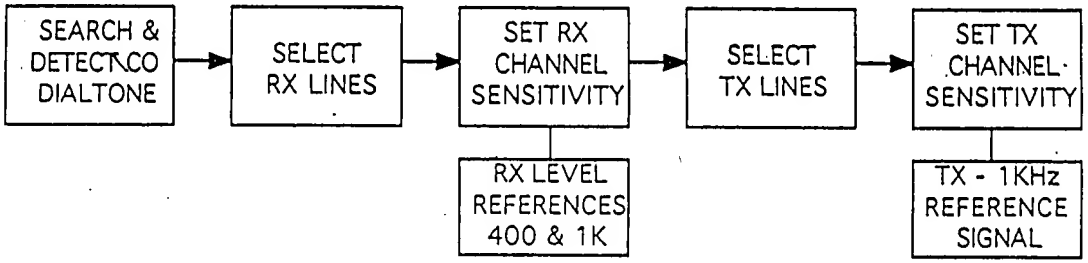


FIGURE 1

"AUTOMATED 800 LEARNING SEQUENCE" FLOW MODEL

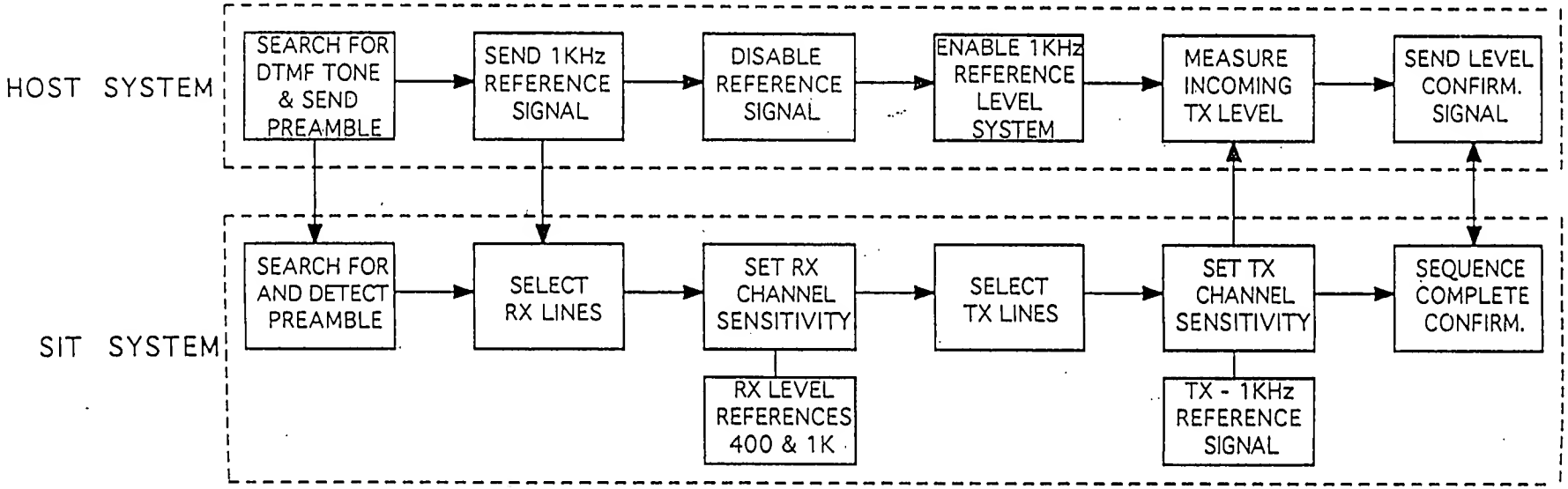
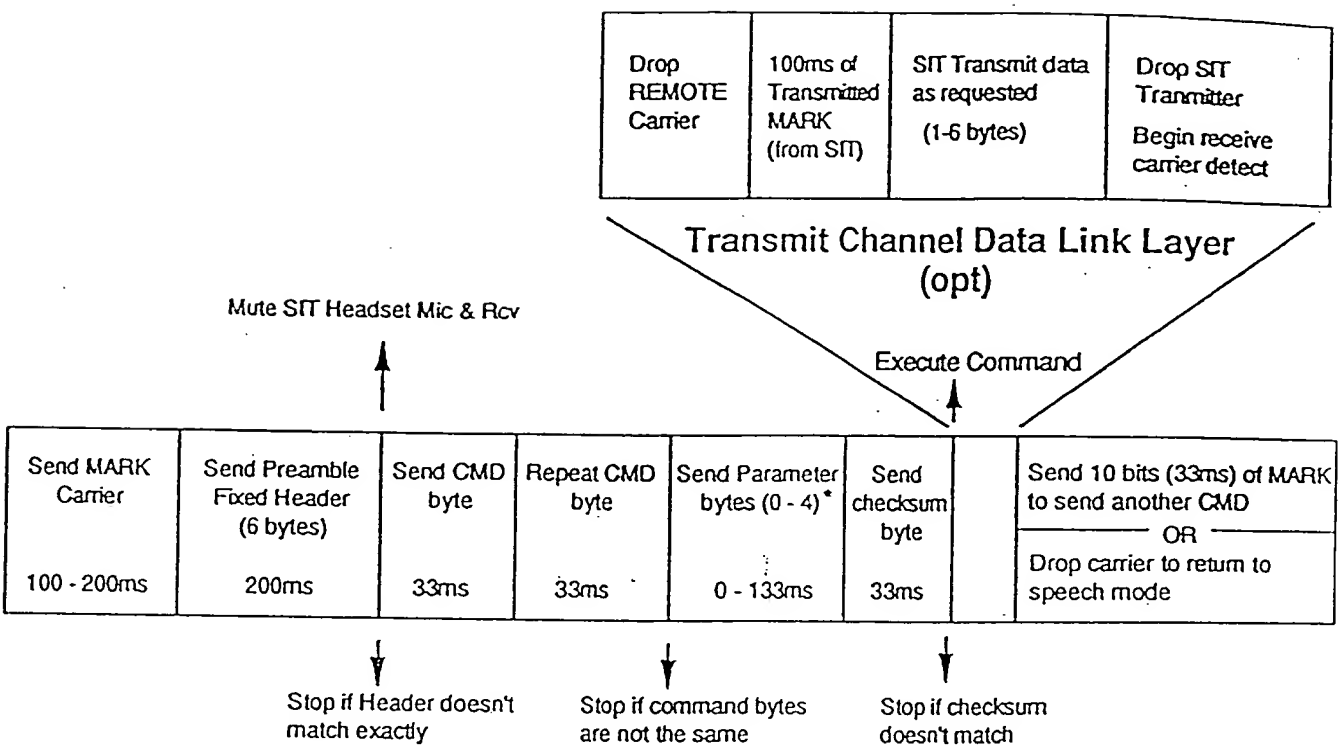
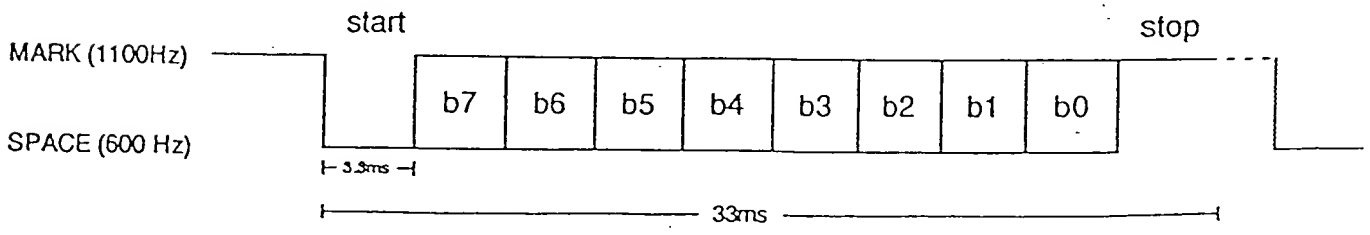


FIGURE 2



* NOTE: The number of parameters is directly dependent on the Command type

Receive Channel Data Link Layer



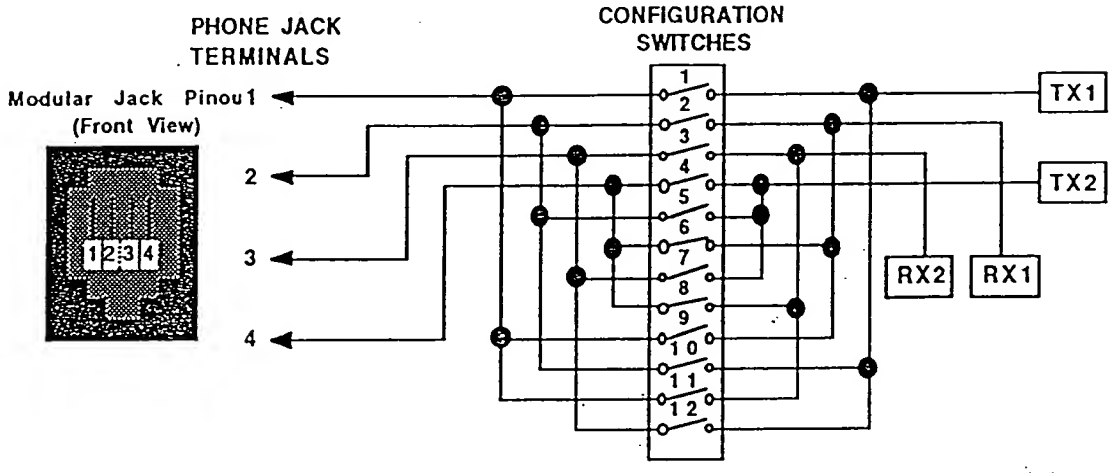
Receive Channel Physical Layer

FIGURE 3

Smart Interface Technology (SIT) Project

Preliminary Line Configuration Switching Algorithms and Model

Equivalent Line Configuration Switching Model



Dialtone Detection	Rx Pinout	Tx Pinout Sequence	Algorithm Ref. No.	Model Sw. "ON"
Pins 2 & 3	Pins 2 & 3	Pins 1 & 4 (Primary)	1	1,2,3,4
Pins 2 & 3	Pins 2 & 3	Pins 1 & 2 (2nd Try)	2	1,2,3,5
Pins 2 & 3	Pins 2 & 3	Pins 1 & 3 (3rd Try)	3	1,2,3,7
Pins 2 & 3	Pins 2 & 3	Pins 4 & 2 (4th Try)	4	2,3,4,10
Pins 2 & 3	Pins 2 & 3	Pins 4 & 3 (5th Try)	5	2,3,4,12
Pins 2 & 4	Pins 2 & 4	Pins 1 & 3 (Primary)	6	1,2,7,8
Pins 2 & 4	Pins 2 & 4	Pins 1 & 2 (2nd Try)	7	1,2,5,8
Pins 2 & 4	Pins 2 & 4	Pins 1 & 4 (3rd Try)	8	1,2,4,8
Pins 2 & 4	Pins 2 & 4	Pins 3 & 2 (4th Try)	9	2,5,8,12
Pins 2 & 4	Pins 2 & 4	Pins 3 & 4 (5th Try)	10	2,4,8,12
Pins 1 & 2	Pins 1 & 2	Pins 3 & 4 (Primary)	11	2,4,11,12
Pins 1 & 2	Pins 1 & 2	Pins 3 & 1 (2nd Try)	12	1,2,11,12
Pins 1 & 2	Pins 1 & 2	Pins 3 & 2 (3rd Try)	13	2,5,11,12
Pins 1 & 2	Pins 1 & 2	Pins 4 & 1 (4th Try)	14	1,2,4,11
Pins 1 & 2	Pins 1 & 2	Pins 4 & 2 (5th Try)	15	2,4,10,11
Pins 1 & 3	Pins 1 & 3	Pins 2 & 4 (Primary)	16	3,4,9,11
Pins 1 & 3	Pins 1 & 3	Pins 2 & 1 (2nd Try)	17	1,3,5,9
Pins 1 & 3	Pins 1 & 3	Pins 2 & 3 (3rd Try)	18	3,5,9,12
Pins 1 & 3	Pins 1 & 3	Pins 4 & 1 (4th Try)	19	1,3,4,9
Pins 1 & 3	Pins 1 & 3	Pins 4 & 3 (5th Try)	20	3,4,9,12

FIGURE 4

Dialtone Detection	Rx Pinout	Tx Pinout Sequence	Algorithm Ref. No.	Model Sw. "ON"
Pins 1 & 4	Pins 1 & 4	Pins 2 & 3 (Primary)	21	7,8,9,10
Pins 1 & 4	Pins 1 & 4	Pins 2 & 1 (2nd Try)	22	1,5,8,9
Pins 1 & 4	Pins 1 & 4	Pins 2 & 4 (3rd Try)	23	4,8,9,10
Pins 1 & 4	Pins 1 & 4	Pins 3 & 1 (4th Try)	24	1,7,8,9
Pins 1 & 4	Pins 1 & 4	Pins 3 & 4 (5th Try)	25	4,8,9,12
Pins 3 & 4	Pins 3 & 4	Pins 1 & 2 (Primary)	26	1,3,5,6
Pins 3 & 4	Pins 3 & 4	Pins 1 & 3 (2nd Try)	27	1,3,6,7
Pins 3 & 4	Pins 3 & 4	Pins 1 & 4 (3rd Try)	28	1,3,4,6
Pins 3 & 4	Pins 3 & 4	Pins 2 & 3 (4th Try)	29	3,6,7,10
Pins 3 & 4	Pins 3 & 4	Pins 2 & 4 (5th Try)	30	3,4,6,10

ALGORITHM REF. NUMBER	SWITCHING MODEL ACTION	ALGORITHM REF. NUMBER	SWITCHING MODEL ACTION
31	Switch 1: "ON"	43	Switch 7: "ON"
32	Switch 1: "OFF"	44	Switch 7: "OFF"
33	Switch 2: "ON"	45	Switch 8: "ON"
34	Switch 2: "OFF"	46	Switch 8: "OFF"
35	Switch 3: "ON"	47	Switch 9: "ON"
36	Switch 3: "OFF"	48	Switch 9: "OFF"
37	Switch 4: "ON"	49	Switch 10: "ON"
38	Switch 4: "OFF"	50	Switch 10: "OFF"
39	Switch 5: "ON"	51	Switch 11: "ON"
40	Switch 5: "OFF"	52	Switch 11: "OFF"
41	Switch 6: "ON"	53	Switch 12: "ON"
42	Switch 6: "OFF"	54	Switch 12: "OFF"

NOTES:

1) Algorithm No. 1 will be the default setting for system power-up, hard or soft resets and "learning" timeout conditions.
2) Ideally all 12 equivalent switches can be selected and switched "on" or "off" independant of the above algorithm's.

FIGURE 5

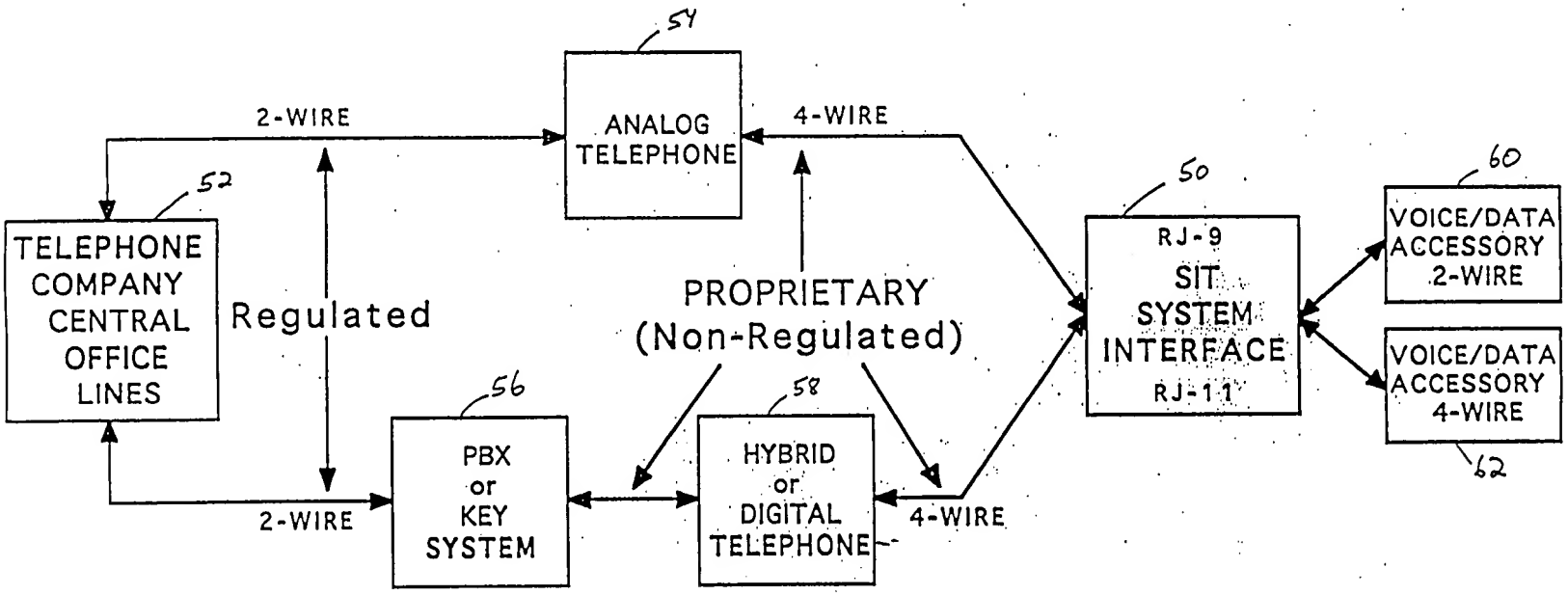


FIGURE 6

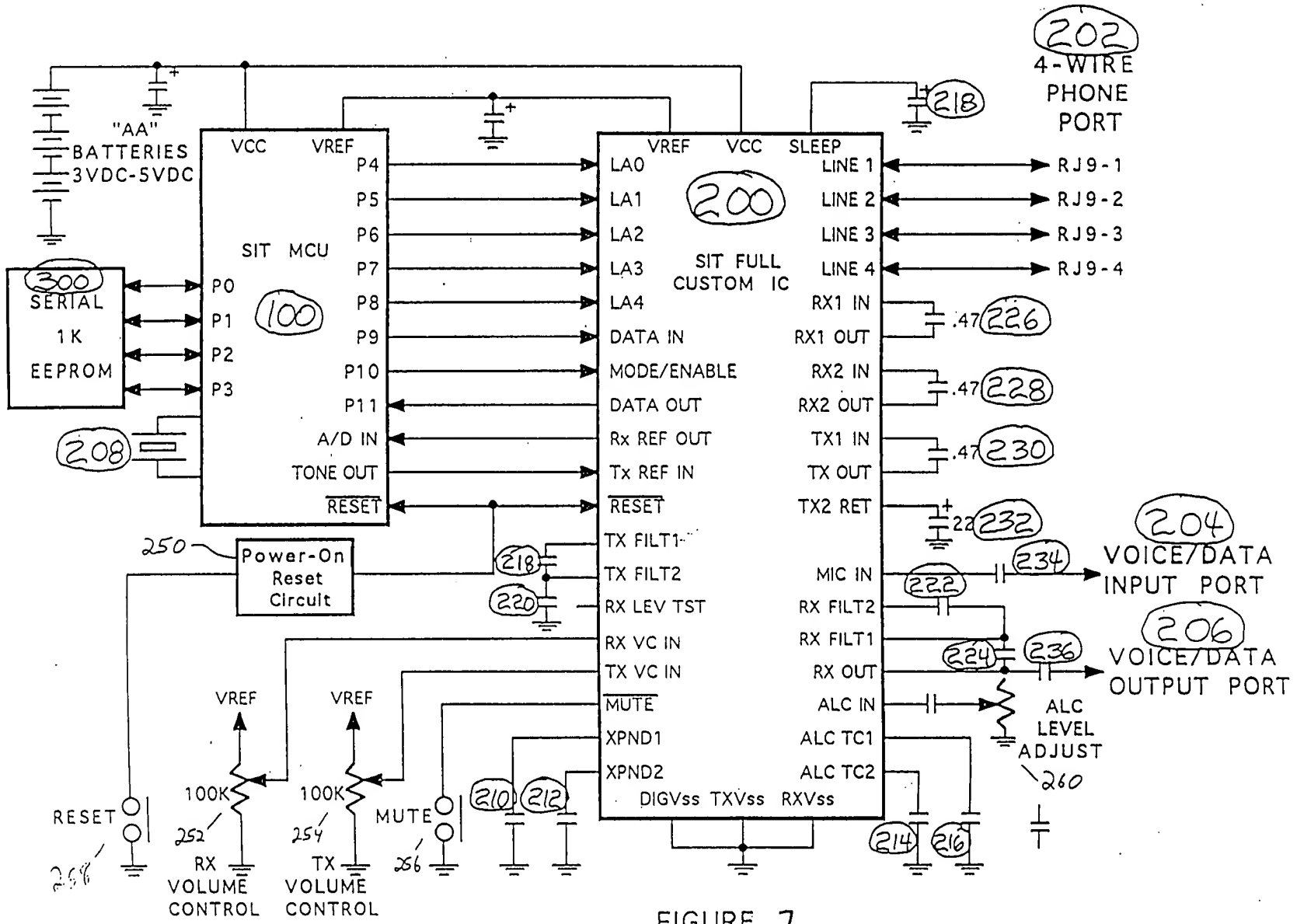

202
4-WIRE PHONE PORT
"AA" BATTERIES 3VDC-5VDC
VCC
VREF
SIT MCU
100
P0
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
A/D IN
TONE OUT
RESET
300
SERIAL 1K EEPROM
208
250
Power-On Reset Circuit
218
220
200
SIT FULL CUSTOM IC
LA0
LA1
LA2
LA3
LA4
DATA IN
MODE/ENABLE
DATA OUT
Rx REF OUT
Tx REF IN
RESET
TX FILT1
TX FILT2
RX LEV TST
RX VC IN
TX VC IN
MUTE
XPND1
XPND2
DIGVss TXVss RXVss
VREF
VCC
SLEEP
LINE 1
LINE 2
LINE 3
LINE 4
RJ9-1
RJ9-2
RJ9-3
RJ9-4
RX1 IN
RX1 OUT
RX2 IN
RX2 OUT
TX1 IN
TX OUT
TX2 RET
MIC IN
RX FILT2
RX FILT1
RX OUT
ALC IN
ALC TC1
ALC TC2
.47 226
.47 228
.47 230
22 232
234
222
224
236
204
VOICE/DATA INPUT PORT
206
VOICE/DATA OUTPUT PORT
ALC LEVEL ADJUST
260
210
212
214
216
VREF
VREF
100K
100K
252
254
RX VOLUME CONTROL
TX VOLUME CONTROL
RESET
MUTE
256
258

FIGURE 7

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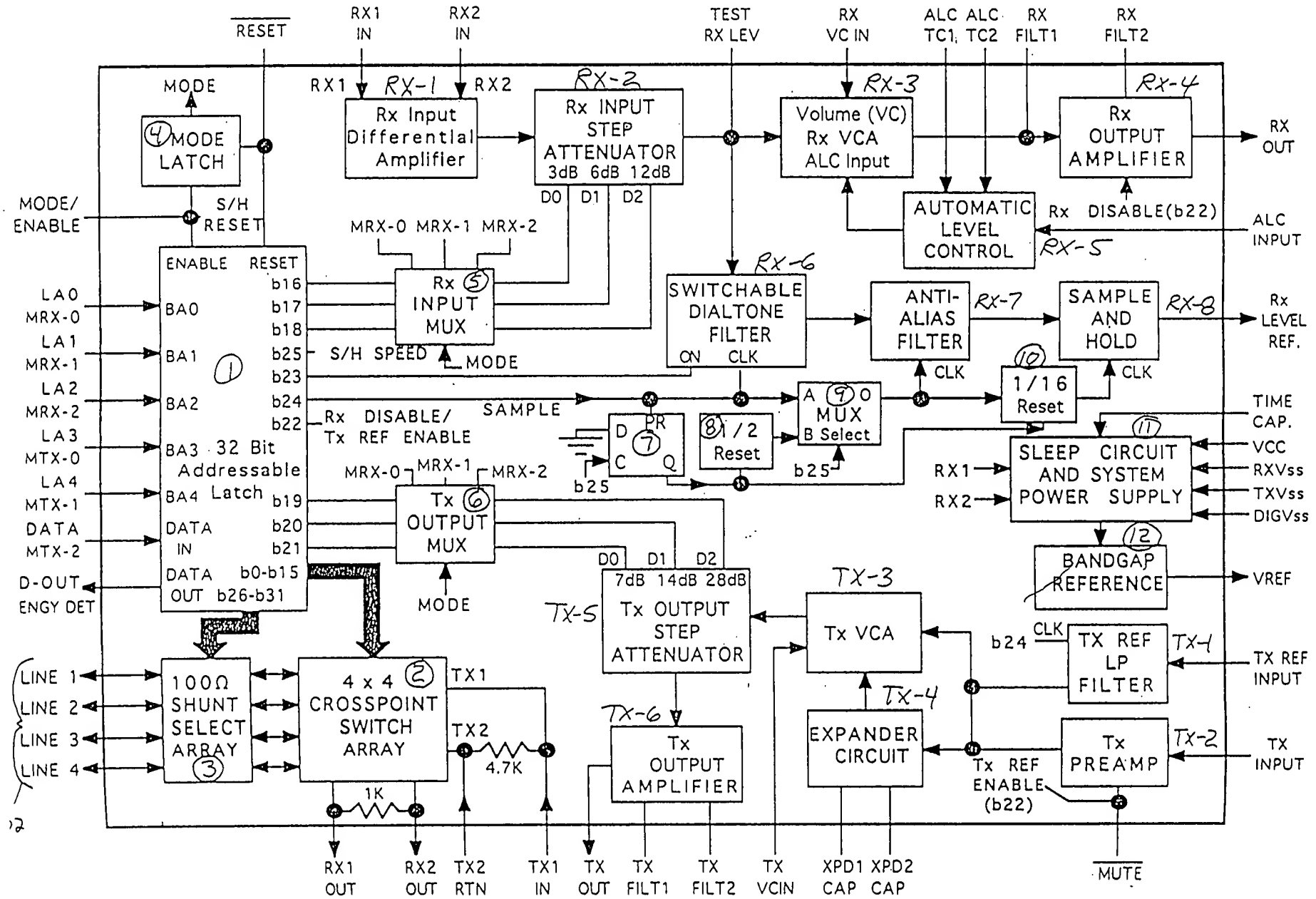
FIGURE 8



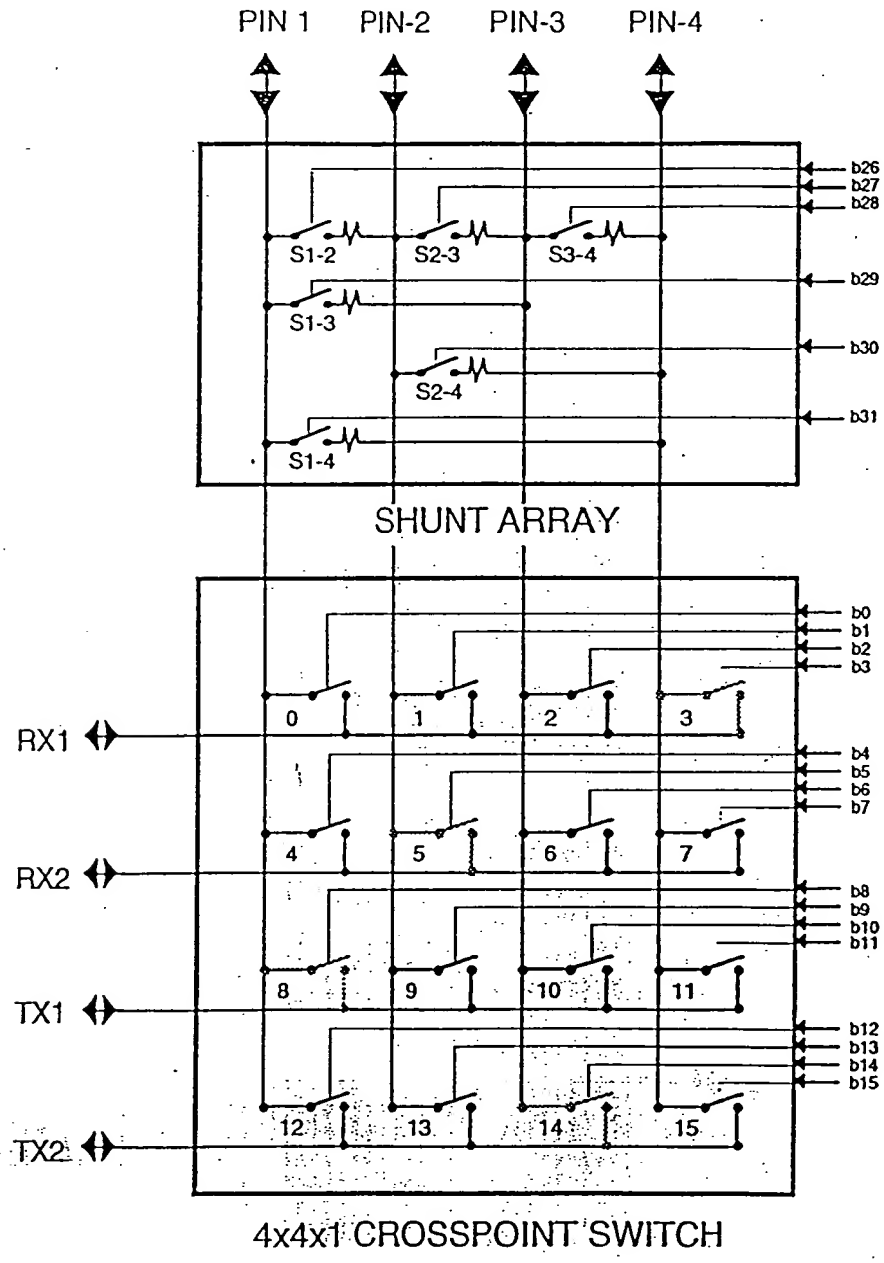

PIN 1
PIN-2
PIN-3
PIN-4
b26
b27
b28
S1-2
S2-3
S3-4
b29
S1-3
b30
S2-4
b31
S1-4
SHUNT ARRAY
b0
b1
b2
b3
0
1
2
3
RX1
b4
b5
b6
b7
4
5
6
7
RX2
b8
b9
b10
b11
8
9
10
11
TX1
b12
b13
b14
b15
12
13
14
15
TX2
4x4x1 CROSSPOINT SWITCH

FIGURE 9